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ABSTRACT

This paper examines the distribution of third person pronominal clitics in Catalan causative constructions (CC), suggesting that an analysis of CC and cliticization crucially involving head-movement (verb incorporation and determiner incorporation) can explain the phenomena. Such an analysis can also explain the optionality of clitic climbing and the relation between cliticization and case. Contains 31 references. (MDM)

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Clitics, Case Checking, And Causative Constructions

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Abstract: In this paper it is argued that the distribution of third person pronominal clitics in Catalan Causative Constructions may receive a principled account if two independently motivated processes are assumed: Det Incorporation, a proper means to check Case, and Verb Incorporation, a process at stake in Causative Constructions. This analysis also gives a proper answer to the theoretical problems that optional Climbing Climbing poses for Chomsky's (1992) Last Resort Principle.

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The distribution of (third person) pronominal clitics in Catalan causative constructions (hereafter: CC) raises many puzzling questions that have not received a principled and comprehensive analysis. Consider the well-known contrast between external and internal arguments of the embedded verb with respect to Clitic Climbing (hereafter: ClCl):

(1) a. *Faré dormir-los junts.
(I) make-FUT sleep-them(ACC) together
b. Els faré dormir junts.
(I) them(ACC) make-FUT sleep together
'I will make them sleep together.'

(2) a. Faré posar-los junts a la Maria.
(I) make-FUT put-them together to the Mary
b. Els faré posar junts a la Maria.
(I) them make-FUT put together to the Mary
'I will make Mary put them together.'

Whereas the causee clitic must climb, the object one may climb or not. It is tempting to account for this contrast in terms of an internal vs. external argument distinction. However, such a distinction is helpless if unaccusative verbs are taken into account:

(3) a. *Va fer venir-los aviat, els metges.
PAST make come-them(ACC) soon the doctors
b. Els va fer venir aviat, els metges.
them(ACC) PAST make come soon the doctors
'The doctors, he made them come soon.'

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(4) a. Que va fer venir-ne molts, de metges?
that PAST make come-of.it many of doctors
b. Que en va fer venir molts, de metges?
that of.it PAST make come many of doctors
'Did he make many doctors come?'

The clitic related to the internal argument of the unaccusative verb venir 'come' is expected to behave as the object clitic in (2) with respect to ClCl: it should optionally climb. However, such an expectation is only partially fulfilled: when accusative, it must climb, just like causee clitics do; nevertheless, when partitive, it may climb or not, just like internal argument clitics do. An explanation on the basis of the internal vs. external nature of the argument must thus be revisited.

Furthermore, dative clitics pose another challenge because clitics related to dative internal arguments cannot climb, as the interpretative contrast between (5a') and (5a") shows:

(5) a. Li faré enviar[lzi] cartes.
him/her-DAT make-FUT send-them-DAT letters
a'. *'I will make them send letters to him/her.'
a". I will make him/her send them letters.'

The contrast between accusative and dative internal argument clitics is again an unexpected result when compared with the contrasts shown above.

After considering all these examples, it is extremely difficult to make any empirical generalization on the range of ClCl in Catalan CC. Moreover, the preceding examples raise many theoretical questions as well. Firstly, let us take into account the optionality of ClCl, as it is shown in (2). Chomsky's (1992) Last Resort Principle (LRP) states that operations (i.e., 'move a') take place just in order to make the derivation converge; in other words, if an operation need not take place, it cannot. Nevertheless, the existence of a phenomenon like optional ClCl prima facie poses a problem for the LRP. Another point is the relation between cliticization and Case. We must ask ourselves whether the different case of the clitic has any role in the distribution of clitics in Catalan CC, as seems to be the case. If the answer is affirmative, we must go further and investigate the place for cliticization in a theory of Feature Checking like that of Chomsky (1992).

In this paper I will suggest that an analysis of CC and cliticization crucially involving head-movement (Verb Incorporation and Determiner Incorporation respectively) can account for the preceding contrasts. Moreover, it will be shown that such an analysis can also provide us with an answer for the two theoretical problems: the optionality of ClCl and the relation between cliticization and Case.

The organization of this paper is as follows. In the first section I will outline the analysis of cliticization I will assume throughout. Afterward, I will briefly work out the issues concerning CC. In the third section I will deal with the distribution of clitics in CC. Finally, the main conclusions will be addressed.

Cliticization as Det Incorporation

In this paper it will be assumed, following Uriagereka (1989, 1992), Laenzlinger (1990) and Roca (1992), which pursued seminal unpublished work by E. Torrego, that cliticization is in fact Determiner Incorporation (hereafter: DI). This is not surprising if looked at from a diachronic perspective: both determiners and clitics have the same origin, Latin demonstratives. From a synchronic point of view, the above-mentioned authors have shown that there is evidence enough to assume that both determiners and clitics are Dets heading their own DP projection. Consequently, the representation I will assume throughout for clitics is the following:[1]

(6)

Given this analysis, cliticization is an instance of head movement. We thus expect its distribution to be constrained by general principles constraining movement (the ECP, if looked at from a standard approach, or a condition on chain formation, if looked at from a minimalist one). This paper is not the place to argue for the advantages of the 'Det Hypothesis' over the 'Affix Hypothesis'. Nevertheless, I will briefly show in the next paragraph how the former might subsume the basic intuitions of the latter, especially with respect to Case.

A Minimalist Approach to Cliticization. Borer (1984), the classical approach to the 'Affix Hypothesis' of cliticization, arrives at the following main conclusions: (a) clitics are generated as features of the head of their phrase -i.e., they are the 'spell-out' of the Case properties of the head; (b) the argument position is filled by a lexical or null NP depending on whether a Case-assigning device is available or

not; (c) the clitic governs the argument NP; and (d) the clitic and the argument NP must be coindexed. Both (c) and (d) straightforwardly follow from the 'Det hypothesis': the moved Det must govern its trace and obviously they must have the same index. Conclusion (b) refers to the question of 'clitic doubling'. As Roca (1992) has argued, the 'Det Hypothesis' can account for this phenomenon without further stipulations (even though the version he adopts cannot): the doubled DP appears on the Spec of the DP headed by the clitic, the complement position being occupied by a pro. The status of this doubled DP is far from clear, but clarifying it would exceed the scope of this paper, so I am focusing my attention on question (a).

The intuition that clitics are the 'spell-out' of the Case properties of heads, even though productive, has not received a clear technical implementation in the literature. The approach to feature checking developed in Chomsky (1992) seems to provide us with a good solution. Nevertheless, some technical background is needed. The next paragraph will be devoted to sketching the basis of this approach. Afterward, we will deal with the relationship between cliticization and Case.

On Feature Checking. Chomsky's (1992) approach to the role played by morphological features in syntax is based on two main points: (a version of) the Strong Lexicalist Hypothesis (SLH) and a theory of feature checking. The SLH assumes, in the spirit of Lexical Phonology, that lexical elements are inserted in syntax with all their morphological features. Verbs will thus be drawn from the lexicon fully inflected for Tense and Agreement (V-features). The same holds for DPs with respect to Case and f-features (N-features). However, if feature assignment devices and, more important, the conditions regulating their application are dispensed with, How is the correct matching of features to be achieved? It is obvious that a theory of feature checking is needed.

Such a theory should give an answer to two basic questions: Why should features be checked? and How are features checked? Answering the first question is quite straightforward if the minimalist approach to linguistic theory is adopted. Chomsky (1992:6) claims that 'the linguistic expressions are the optimal realizations of the interface conditions, where 'optimality' is determined by the economy conditions of UG.' From this point of view, it seems quite plausible to regard morphological features as elements that may be dispensed with at LF, because they play no role at this interface level. Therefore, if a feature is not checked before LF-interpretation applies, the input to this interface level will not be optimal, making the derivation crash.

The question of how features are checked may be divided into two aspects: the formal checking device and the structural conditions regulating its application.

Regarding the first aspect, it is worth noting that while answering the question of why checking was necessary a sketch of a formal checking device has implicitly been suggested. If features must disappear before LF-interpretation applies, it is logical to regard checking as an elision process: features are checked, if they correctly match, they are eliminated; if they don't, they remain and the derivation crashes at LF.

The structural conditions regulating checking are quite straightforward: the (element carrying the) feature must be in a local relation with an appropriate head, i.e., a head carrying the same feature. Technically speaking, a feature must enter into the checking domain of a head carrying the same feature, where the 'checking domain' of a head a is the minimal set of nodes (the complement excluded) contained in MAX (a) that are distinct from a and do not contain a (see Chomsky 1992).[2] Namely, the checking domain of a head includes its specifier and anything adjoined (adjunction being allowed to its maximal projection, its specifier, or its head). A feature may be checked in any of these positions.

Case Checking. According to the SLH, argument DPs bear a Case when entering the syntactic component.[3] So then, they must enter into the checking domain of a Case-bearing head. Three logical options exist: raising to the specifier, adjunction to the specifier, and adjunction to the head.[4] The former -raising to the specifier- is, according to Chomsky & Lasnik (1991) and Chomsky (1992), the core realization of structural Case checking. Given the highly articulated structure of the clause, argument DPs, which are generated VP-internally, move to the specifier of their respective agreement heads (Agr-S and Agr-O). There they enter into the checking domain of V, which has previously adjoined to the Agr head to check its inflectional features (see Chomsky (1992) for a detailed analysis).

The second option -adjunction to the specifier- seems to be restricted to a single case: sentences with a there-DP pair of the kind:

(7) There is a unicorn in the garden.

The DP *a unicorn* bears nominative case, but it cannot check it in situ. Note that the presence of the expletive *there* makes raising to the specifier of Agr-S (or Tense) impossible. The only possibility is to adjoin the DP to the expletive in the specifier of Agr-S/Tense (at LF), checking its nominative case feature with Agr-S/Tense. The resulting chain ([DP-there], t) will be a legitimated object at LF: its head, [DP-there], has all their features checked and its tail, t, gives the chain an interpretation (linked to the q-role associated with that position).

The latter -adjunction to the head- has not been taken into account in the literature. In the following paragraph, we will try to show its plausibility.

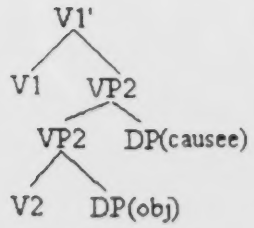
Cliticization and Case Checking. Consider a typical head-complement configuration. We have seen before that DPs have a Case to be checked with the verb. Raising to the specifier of an Agr head gives DPs the chance to indirectly enter into the checking domain of a verb and hence to check their Case features. However, a simpler option is available: adjunction of the head of DP to the verb, that is, DI. By means of DI, the Det carrying the Case feature of the whole DP will enter into the checking domain of the verb (see note 3). If this approach is correct, cliticization would be a proper means to check Case features.

The consequences such a proposal would have for the theory of Feature Checking seem very promising but so intricate that it would depart from the goals we are concerned with. As a result, I am not pursuing this matter further. In the remainder of the paper I will assume that cliticization -conceived of as an instance of DI- is a licit means of checking the Case features of DPs.

On the Constituent Structure of Causative Constructions

The analysis of CC that will be followed here is that of Villalba (1992, 1993), which is mainly based on Li (1990) and Guasti (1992). Basically, I will assume that the constituent structure of CC is as follows:

(8)



The causative verb (V1) selects a verbal projection, VP2, as a complement. This verbal projection has an X-bar subject, the causee, which asymmetrically c-commands the internal arguments of the verbal head, V2.[5] Furthermore, V2 incorporates into V1 (plausibly) for tense reasons (see paragraph 2.3.2.). In the remainder of this section I will briefly justify such an analysis.

The Causee Is a VP-Internal Subject. This paragraph will be devoted to showing that there is enough evidence for assuming that the causee is the X-bar subject of V2, that is, the argument that asymmetrically c-commands the internal arguments

of V2.

Support for this hypothesis comes from Weak Crossover (hereafter: WCO) effects. A descriptive generalization subsuming WCO effects is found in Lasnik & Stowell (1991):

(9) In a configuration where a pronoun P and a trace T are both bound by a quantifier Q, T must c-command P.

This phenomenon provides us with a clear-cut test to set up the c-commanding relations within $V2^n$. Moreover, given our hypothesis that the causee asymmetrically c-commands the internal arguments of V2, a prediction can be made: a quantifier in the causee position would share its index with a pronoun within the object position, but not conversely. The prediction is borne out, as the LF representations of the following sentences show:

(10) a. El Pere ha fet convidar tothom a la seva mare.
the Peter has made invite everybody to the his mother
'Peter has made his mother invite everybody.'

a'. *[for every x, x a person, Peter made x's mother invite x]

a". [for every x, x a person, Peter made y's mother invite x]

b. El Pere ha fet convidar la seva mare a tothom.
the Peter has made invite the his mother to everybody
'Peter has made everybody invite his mother.'

b'. [for every x, x a person, Peter made x invite x's mother]

Furthermore, wh-phrases show the same behavior:

(11) a. Qui vas fer convidar a la seva mare?
Who PAST make invite to the his mother
'Who(m) did you make his mother invite?'

a'. *[for which x, x a person, you made x's mother invite x]

a". [for which x, x a person, you made y's mother invite x]

b. A qui vas fer convidar la seva mare?
to whom PAST make invite the his mother
'Whom did you make invite his mother?'

b'. [for which x, x a person, you made x invite x's mother]

Whereas a quantifier or a wh-phrase in object position yields a WCO effect when binding a pronoun within the causee position at LF, the sentence becomes perfect in the converse configuration. It must be concluded thus that the causee asymmetrically c-commands the internal arguments of V2. There is thus enough evidence to assume our initial hypothesis: the causee is the VP-internal subject of

V2.[6]

Causative Verbs Select a Verbal Projection.

Lack of tense: There exist many empirical arguments supporting the hypothesis that causative verbs select a verbal projection as a complement. Lack of embedded tense is the most striking one.[7] Consider the following sentences:

(12) a. Ahir el Pere li va ordenar atacar el campament avui.
yesterday the Peter him-DAT PAST ordered attack the camp today
'Yesterday Peter ordered him to attack the camp today.'

b. *Ahir el Pere li va fer atacar el campament avui.
yesterday the Peter him-DAT PAST make attack the camp today
'Yesterday Peter make him attack the camp today.'

The contrast is clear-cut: CC have just one tense domain for both verbs, as a result, only one temporal adverb can be licensed.[8] If tense domains are to be derived from the presence of a Tns node, the preceding contrast might provide good evidence against analyses of CC involving an embedded Tns projection.

A similar conclusion arises if the interaction of CC and aspectual auxiliaries is taken into account:

(13) a. *El Pere va fer haver trencat el vidre al nen.
the Peter PAST make have broken the glass to-the child
*'Peter made the child have broken the glass.'

b. *La baixa temperatura va fer ser freda la sopa.
the low temperature PAST make be cold the soup
*'The low temperature made the soup be cold.'

It is not sharply clear why CC cannot contain aspectual auxiliaries. Lema (1991) suggests that aspectual auxiliaries head a SAsp(ect) projection selected by Tns. If CC have no Tns projection at all, it is impossible for SAsp to appear. Guasti (1992) arrives at a similar conclusion. It might thus be assumed that the ill-formedness of the examples in (13) is a direct consequence of the lack of an embedded Tns projection, a prerequisite for licensing an aspectual auxiliary.

Lack of agreement: It may be assumed on the basis of the evidence shown above that Catalan CC involve no Tns projection at all. However, nothing has been said about agreement. Is there an embedded Agr projection in Catalan CC? It is extremely difficult to ask this question because no trace of overt Agr appears in Catalan infinitives. Our evidence in this point cannot be direct. Nevertheless, if we assume that CC have a unique structure (this is fact the null hypothesis), the evidence from other languages sheds light on this aspect of Catalan CC. Languages

having morphological causatives show no trace of an embedded Agr. Look at the following Chichewa examples from Alsina (1992):

(14) a. Nungu i-na-mú-phík-its-á máungu (kadzidzi).
9:porcupine 9:SUBJ-PAST-cook-CAUS-IND 6:pumpkins 1:owl
'The porcupine made it cook the pumpkins (the owl).'

b. Nkhandwe zi-ku-wá-mény-er-á njovu (ana).
10:foxes 10:SUBJ-PRES-2:OBJ-hit-APPL-IND 9:elephant 2:children
'The foxes are hitting the elephant for them (the children).'

Chichewa CC show the same behavior as simple transitive sentences with respect to agreement: one argument, the causee in CC and the beneficiary in benefactive applicatives, may trigger agreement with the complex verb. In general, in languages having morphological CC, the agreement properties of CC are basically the same we found in other transitive sentences. If CC involved an embedded Agr, it would be very difficult to trace any relation for this similarity. Nothing thus points to the existence of an embedded Agr in CC.

The same holds for English. Unlike a verb selecting a CP/IP (e.g. 'want' or 'believe'), the causative verb 'make' does not allow the infinitival inflection to appear:

(15) a. John makes Mary open the door.
b. *John makes Mary to open the door.
c. *John wants Mary open the door.
d. John wants Mary to open the door.

Finally, languages having inflected infinitives do not allow them to appear in CC (see Jones (1990:193) for Sardinian and Alvarez, Regueiro, & Monteagudo (1986:396) for Galician). On the basis of these facts we have evidence enough to conclude that CC have no embedded Agr projection in the above mentioned languages. However, what about Catalan? The question is to be answered theory-internally. The null hypothesis is that CC have a unique structure cross-linguistically regardless of its variation. Variation should be explained in terms of parametric differences concerning core aspects of UG. Consequently, even though we have no empirical evidence to decide whether the complement of Catalan causative verbs contains an Agr node or not, theory-internal coherence brings us to argue against the presence of such a functional projection.

Embedded Negation: Another argument against the clausal status of the causative complement is the marginality of embedded negation. There exists a sharp contrast in the following pair of sentences:

(16) a. El Pere no li va fer comprar patates.
the Peter not to-him PAST make buy potatoes
'Peter did not make him buy potatoes.'
b. ??El Pere li va fer no comprar patates.
the Peter to-him PAST make not buy potatoes
'Peter made him not buy potatoes.'

It might seem that the presence of embedded negation is, in spite of its marginality, a proof of the clausal nature of the causative complement. However, as it has been argued before (see Guasti (1992) for Italian and Villalba (1993) for Catalan and Spanish; cf. Ritter & Rosen (1993)), the negation in these constructions does not haveä a clausal status. In other words, it is an instance of constituent negation. The scope interaction of negation and quantifiers shows us that this must be so.

(17) a. El Pere desitjava no tenir molts problemes.
the Peter wanted not have many problems
'Peter wanted not to have many problems.'
a'. [for many x, x problems, Peter wanted not to have x]
a". [for not many x, x problems, Peter wanted to have x]
b. ??El Pere ha fet no venir molts alumnes.
el Pere has made not come many students
'Peter made many students not come.'
b'. [for many x, x students, Peter made x not come]
b". *[for not many x, x students, Peter make x come]

As the LF representations show, when an embedded controlled sentence is negated, either the quantified phrase -(17a')- or the negation -(17a")- may have wide scope, as it is expected for a clausal negation. However, when embedded negation under a causative verb is taken into account, only the quantifier phrase may have wide scope -(17b'). This behavior corresponds to a constituent negation status rather than to a clausal one. It may be argued then that, even though embedded negation is marginally possible under causative verbs in Catalan, it should be analyzed as an instance of constituent negation. But, why is this so? The answer is quite simple if the empirical and theory-internal evidence presented so far in this paragraph is taken into account: causative complements are verbal projections in Catalan, so they leave no chance for the presence of a clausal negation. It seems thus to be the case that, contrary to prima facie expectations, embedded negation whenever is possible argues against the clausal status of the causative complement.

To sum up, both empirical and theoretical evidence point to the hypothesis that Catalan CC select a verbal projection. Such a hypothesis will be assumed

throughout.

Verb Incorporation.

Some Empirical Evidence: It has commonly been accepted in the literature that CC involve some kind of complex verb formation. Such an intuition has been set up in different ways depending on the authors and the framework. In this paper I will follow Aissen (1979), Baker (1988), Li (1990) and Guasti (1992) and assume that CC involve Verb Incorporation (hereafter: VI) of V2 to V1 in order to create a complex verb. Consider the following examples (the Swahili example is quoted from Vitale (1981)):

(18) a. mwalimu hu-wa-som-esh-a wanafunzi kurani.
teacher HAB-2:OBJ-study-CAUS-IND students Koran

b. El professor fa estudiar l'Alcorà als estudiants.
the teacher makes study the-Koran to-the students
'The teacher makes the students study the Koran.'

Looking at causativization as a Grammatical Function changing process, both languages behave exactly: the verb increases its valency with a new argument (the causer). Nevertheless, the two languages seem to have a very different syntactic correlate of this GF-changing process: whereas an affix is added to the verb in Swahili, the causativized verb is embedded under a causative verb in Catalan. However, it may be argued that the difference is less important than seems to be. Namely, on the one hand, the causative affix in Swahili is also a verb selecting a verbal projection; on the other, V1 and V2 also form a complex verb in Catalan (this is indeed the null hypothesis). Furthermore, there exists some empirical evidence pointing to such a conclusion. Consider the following sentences:

(19) La Maria ha fet acabar completament la feina al Pere.
the Mary has made finish completely the task to-the Peter
'Mary made Peter finish the task completely.'

(20) Els nens fan treballar tots la Maria.
the children make work all the Mary
'The children all make Mary work.'

(21) Els nens no faran treballar pas la Maria.
the children not make-FUT work neg the Mary
'The children will not make Mary work.'

In all three examples, V2 appears to the right of different fixed elements: a VP-adjoined adverb, a floating quantifer, and a negative particle, respectively. If, as it is commonly assumed (e.g., Belletti (1991), Pollock (1989), and Sportiche (1988)), a main verb surfacing to the right of these elements has moved from its original position, the same must be said of V2 in (19)-(21). But, where does V2

move to? If the constituent structure of CC proposed so far is assumed, there is just one (initial) landing site for the moved verb: V1. Any other move would violate the requirement that chains be minimal.[9] In fact, it seems to be the case that V2 incorporates to V1 -ex. (19)- and then they both move up to different functional heads leaving back the floating quantifier in subject position -ex. (20)- and the negative particle in the Spec (or head) of NegP -ex. (21).[10] I am not entering into details, however. For our purposes, the evidence presented so far is enough to motivate VI in Catalan CC.

Theoretical motivation and consequences: We have just seen that an analysis of Catalan CC involving VI was tenable on empirical grounds. However, something has to be said on its theoretical motivations and consequences. One theoretical motivation of VI might follow from the structure of CC assumed so far. We have seen that the causative complement had no Tns projection at all. However, as different authors have suggested (see Guéron & Hoekstra (1988), Zagona (1988)), events are to be licensed by Tns. In that case, the event argument of the embedded VP would have no chance of being licensed in situ.[11] The only way for the embedded event to be licensed is VI: once V2 incorporated, the embedded event is accessible to the main Tns and can hence be licensed. This analysis straightforwardly follows from the constituent structure of CC proposed in (8), so I will assume it to be correct. For other arguments, see Guasti (1992), Li (1990) and Villalba (1993).

What about the consequences that VI has for UG? While discussing Noun Incorporation, Baker (1988) raises the question of how complex heads behave with respect to Case. Simple heads have their Case features listed in the lexicon, but something new has to be assumed for heads formed in syntax. It seems quite plausible to assume, following Di Sciullo & Williams (1987), that Case (and other relevant) features of the simple verbs involved in VI percolate up to the complex one. Nevertheless, an immediate question arises: is feature percolation somehow restricted or is it rather a feature addition process? Baker (1988) gives overwhelming evidence against feature addition. Furthermore, he proposes the following principle constraining feature percolation:

(22) Case Frame Preservation Principle
A complex X of category A in a given language can have at most the maximal Case assigning properties allowed to a morphologically simple item of category A in that language. (Baker 1988:122)

Putting its conceptual adequacy aside, the Case Frame Preservation Principle (hereafter: CFPP) seems to be highly desirable on empirical grounds. It provides us with an explanation of the following ungrammatical sentences:[12]

(23) a. *La Maria va fer comprar un cotxe als nens al Pere.
the Mary PAST make buy a car to-the children(DAT) to-the Peter(DAT)
'Mary made Peter buy the children a car.'

b. *La Maria va fer comprar un cotxe el Pere.
the Mary PAST make buy a car(ACC) the Peter(ACC)
'Mary made Peter buy a car.'

Even though, both fer 'make' and comprar 'buy' can each legitimate an accusative and a dative DP, the resultant complex verb cannot legitimate neither two lexical datives nor two accusatives. In other words, no Case feature addition seems to be allowed at all. The CFPP thus constrains feature percolation in complex verb formation: complex verbs would bear as many case features as a simple one. This will have crucial consequences for our analysis of dative clitics (see paragraph 3.2.).

On Clitics in Causative Constructions

Let us make a summary of the conclusions we have arrived at so far: (a) cliticization may receive a proper analysis as an instance of DI; (b) DI is a proper means to check Case features; (c) CC have the constituent structure in (8); and (d) CC involve complex verb formation -i.e., VI- under the constraints posed by the CFPP. Now we have the basic skills to return to the contrasts sketched at the beginning of this paper.

Non-Dative Clitics.

Causee clitics: Let us consider the behavior of causees with respect to ClCl:

(24) a. *Faré dormir-los junts, els nens.
make-FUT sleep-them(ACC) together the children

b. Els faré dormir junts, els nens.
them(ACC) make-FUT sleep together the children
'The children, I will make them sleep together.'

The Det head of the causee cannot incorporate to V2. As it has been shown in paragraph 2.1., the causee asymmetrically c-commands the internal arguments of V2. It must also be the case -by transitivity-that it asymmetrically c-commands V2 as well. As a result, the causee Det incorporating to V2 from the causee position would create an ill-formed chain (see note 9): the head would not c-command its trace making the derivation crash.[13] The independently motivated constituent structure of CC can easily explain why causees must climb.[14]

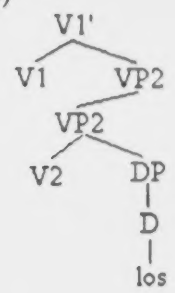
Internal argument clitics: transitive verbs: Consider again the following

contrast:

(25) a. Faré posar-los junts a la Maria.
(I) make-FUT put-them together to the Mary
b. Els faré posar junts a la Maria.
(I) them make-FUT put together to the Mary
'I will make Mary put them together.'

Let us assume that the (simplified) constituent structure underlying both sentences is:

(26)



Now let us suppose that DI precedes VI. Det must check its Case features with an appropriate head. Given the structure in (26), three possible landing-site heads arise: V2, V1, and a higher head. However, only the former, V2, is available. The Det incorporating either to V1 or to a higher head would yield a violation of economy principles -namely, the condition that the links of a chain must be minimal (see Chomsky (1992:21)), because a more accessible landing site (i.e. V2) would be skipped. The Det must thus incorporate to V2 in order to check its Case features. Once incorporated, the Det must remain incorporated to V2, because its moving up would violate economy principles. On the one hand, incorporation to a head higher than V1 would still form a non-minimal chain, making the derivation crash. On the other hand, incorporation to V1 would now form a minimal chain. However the Det has already checked its Case features, so it has no features to check with V1. This movement would thus violate the LRP, because it is not necessary to make the derivation converge. As there is no chance for DI to apply, VI will apply incorporating the complex formed by V2 plus the Det to V1. Once there, things do not change for the Det: even if DI were still allowed to apply, Det could still not incorporate to V1, because of the LRP. Furthermore, it could not incorporate to a higher head either, because a non-minimal chain would result. The resulting complex verb will show the following structure:

(27) [V1 V1 [V2 V2+Det]]

The Det must remain adjoined to V2, a correct result for sentences like (25a).

We have just seen how the non-climbed version is the only possibility whenever DI precedes VI. Let us see what happens when it is VI that precedes DI, instead.

As it has been shown in paragraph 2.3., V2 incorporates to V1, forming a complex verb. Moreover, it was also suggested, following Di Sciullo & Williams (1987), that the features of each verb percolate up to the complex one (under the constraint of the CFPP). So then, once VI has applied, neither V1 nor V2 can further count as landing sites for the Det moving to check its Case features: the movement would not be motivated by feature checking, yielding a LRP violation. The only way for the Det to check its Case features is thus incorporation to the complex verb.[15] Note that this movement satisfies economy principles. It satisfies the LRP because it is triggered by Case checking. Furthermore, the resulting chain is minimal because feature percolation plausibly affects indices as well, so the potential intervening heads (V1, V2, and the trace of V2) do not count as heads distinct from the complex verb but rather as segments of it. The resultant complex verb would have a structure like the following:

(28) [V1 Det [V1 V1+V2]]

The Det must adjoin to the complex verb, a good result for sentences like (25b).

Let us make a summary of the analysis just suggested. We have seen how the optionality of ClCl showed in (25) is not optional at all, rather it can be derived from the interaction of two independent processes: DI -an independently motivated mechanism to check Case features- and VI -an operation at stake in CC. If DI precedes VI, the non-climbed version necessarily results -i.e. (25a). If VI precedes DI, clitics must climb -i.e. (25b).

Before closing this paragraph, let us make a brief comment on the theory-internal aspects of this approach. Leaving aside its empirical plausibility, this approach to optional ClCl seems to be plausible on theoretical grounds as well. On the one hand, because of its being the result of the interaction of two independent processes (VI and DI), no additional machinery nor stipulation is needed to account for the data. On the other hand, it gives a principled solution to the puzzle that optional ClCl posed to the LRP: optional ClCl is perfectly compatible with a principle like the LRP since no optional movement is involved at all. The apparently optional behavior of ClCl is rather the result of the order in which DI and VI apply.

Internal argument clitics: unaccusative verbs: Let us now consider the

distribution of clitics heading the internal DP argument of an unaccusative verb.

(29) a. *Va fer venir-los aviat, els metges.
PAST make come-them(ACC) soon the doctors
b. Els va fer venir aviat, els metges.
them(ACC) PAST make come soon the doctors
'The doctors, he made them come soon.'

(30) a. Que va fer venir-ne molts, de metges?
that PAST make come-of.it many of doctors
b. Que en va fer venir molts, de metges?
that of.it PAST make come many of doctors
'Did he make many doctors come?'

The behavior of internal arguments of unaccusative verbs is prima facie surprising: if the Det is accusative, it must climb, whereas if partitive, it may optionally climb. From what we have seen in previous paragraphs, the expected distribution is that of (30): the Det heading an internal DP argument may climb or not depending on whether VI applies before or after DI. Namely, the sentences in (30) would receive the same analysis that those in (25). But what is this not so in (29) as well? The answer is quite straightforward for our approach to cliticization as a Case checking device. Let us consider (29a). It seems to be the case that the accusative Det has incorporated to V2 in order to check its [+acc] Case feature. However, this poses an unsolvable problem: on the one hand, venir 'to come' obviously has no [+acc] feature to be checked with; on the other, the Det cannot move up, as we have seen in paragraph 3.1.2. We have then an [+acc] feature (that of the Det) that cannot be checked, making the derivation crash. In other words, sentence (29a) cannot receive a convergent derivation. Hence, the contrast between accusative and partitive clitics with unaccusative verbs follows from simple assumptions on the structure of UG, namely, the requirement that features must be checked.

Dative Clitics. Let us finally take into account dative clitics:

(31) a. Li faré envia'ls-hi cartes.
him/her-DAT make-FUT send-them-DAT letters
a'. *'I will make them send letters to him/her.'
a". 'I will make him/her send them letters.'

The non-climbed clitic must be understood as the indirect object of V2, whereas the climbed one can only be understood as the causee. Let us see how this distribution can be accounted for under our analysis.

We have two dative DPs -the indirect object and the causee- and two heads -V1 and V2- bearing a [+dat] feature each.[16] According to this, a proper derivation

for (31) would be as follows. DI precedes VI. Consequently, the head of the indirect object DP must incorporate to V2 exactly as the direct object had to (see paragraph 3.1.2. for a complete derivation). On the other hand, the head of the causee cannot incorporate to V2, as it has been shown in paragraph 3.1.1. (see also notes 11 and 15). Therefore, the causee Det incorporates to V1, where it checks its [+dat] feature. Afterward, VI applies yielding the following complex verb structure corresponding to the correct interpretation (31a''):

(32) [V1 Det(causee) [V1 V1 [V2 V2+Det(ind.obj.)]]]

To sum up, if DI precedes VI, the correct interpretation results. On the one hand, economy principles force the indirect object Det to incorporate to V2. On the other hand, the independently motivated hypothesis that the causee is the X-bar subject of V2 can straightforwardly account for the obligatoriness of causee Det climbing.

What happens with (31a')? Let us see why such an interpretation cannot be obtained. It has just been shown that the dative causee Det cannot appear on V2 regardless of its case. However, no principled reason has been suggested to prevent a Det heading a dative DP internal argument from climbing. In fact, a derivation like that of non-dative climbed Dets -i.e., VI precedes DI- prima facie seems to be possible. Nevertheless, the crucial point is that the parallelism with non-dative Dets ceases to be operative at this point. Given the analysis of VI sketched in paragraph 2.3., if VI precedes DI, the resultant complex verb will inherit the Case features of both V1 and V2 under the conditions posed by the CFPP. This had no relevant consequences for non-dative climbed Dets, because the incorporated Dets borne a different Case feature each: the CFPP allowed the complex verb to inherit enough Case features to license the non-dative internal argument and the causee -i.e. one accusative and one dative feature. However, when two dative DPs come up, the things radically change. The CFPP still allows the complex verb to inherit one accusative and one dative feature, but now these features are not enough to license both the indirect object and the causee. In other words, even though V1 and V2 bear a [+dat] feature each, the resultant complex verb will bear just one [+dat] feature, otherwise a violation of the CFPP would result. That amounts to saying that once VI applies one of the two dative Dets will not be able to check its Case feature, making the derivation crash at LF (see paragraph 2.1.). Therefore, (31a') could not receive a convergent derivation, a good result for our analysis. Moreover, such a Case-based approach to the contrast in (31) can easily be tested. It allows us to make the following prediction: if we had a dative internal argument but no causee, the former would climb without any problem. The prediction is borne out, as CC involving unaccusative embedded verbs show:

(33) a. Els hi faré arribar aquelles cartes.
them-DAT make-FUT arrive those letters
'I will mail them those letters.'

b. Aquell còctel li va fer venir gana.
that cocktail him/her-DAT make come appetite
'That cocktail whetted his appetite.'

The Det heading the dative internal argument of the unaccusative verb may climb because only one dative DP is to be licensed by the complex verb.[17] It seems thus that the existence of sentences like (33) gives us additional support for the Case-based approach to the distribution of dative clitics in Catalan CC.

Conclusions

Our approach to the distribution of clitics in CC has rested on very simple grounds Firstly, the constituent structure of CC gave us an answer to the obligatoriness of ClCl with external arguments. Secondly, optional ClCl was derived from the interaction of two independent processes -DI and VI- and general principles of UG. Depending on the order in which DI and VI take place, the clitic climbs or not. This optionality does not extend to internal dative clitics, since the complex verb can only license a [+dat] feature because of the CFPP. Consequently, for a CC with two dative Dets to converge DI must precede VI, following the correct distribution of dative Dets. Finally, such an analysis has proved to correctly predict the distribution of Dets heading dative internal arguments in CC with unaccusative verbs.

NOTES

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[1] Laenzlinger (1990) and Roca (1992), following Uriagereka (1992), explicitly assume the Det to select a null *pro* as a complement. Another noteworthy option would be to consider clitics as intransitive Dets, in the way Abney (1987) treats pronouns. Anyway, the decision between one of these analysis is not relevant for the discussion. So then I am not making a choice here.

2 According to Chomsky (1992:15) 'the category A contains B if some segment of A dominates B.

3 It is a matter of discussion whether Case is a property of Det's or of N's (see Chomsky 1992:n. 35). I will nevertheless make the assumption -rather plausible if we look at a language like German, where the Det is inflected for Case- that it is Det rather than N that bears N-features (i.e., Case and phi-features).

4 Indeed, a fourth logical possibility exists: adjunction to the maximal projection. Much research on this possibility, which has not been taken into account in the literature, is needed.

5 I am assuming the standard version of c-command: A c-commands B iff A does not dominates B and every branching node dominating A also dominates B.

6 The conclusions arrived at in this paragraph go against Li (1990), who claims that the causee and the internal arguments of V2 mutually c-command in languages like Catalan. Moreover, a corollary of this conclusion is that dative causees are not PPs but DPs. In other words, the element *a* 'to' is not a true preposition, but an inserted Case-assigner. In Branchadell (1992) it is convincingly argued that the same conclusion holds for all instances of lexical and non-lexical datives. However, for the differences between dative causees and other dative DPs see Villalba (1993).

7 Obviously, there exist instances of CC involving a CP complement in many languages. Consider:

(i) El Pere va fer que la Maria comprés el diari.
the Peter PAST make that the Mary buy the newspaper
'Peter made Mary buy the newspaper.'

Nevertheless, sentences like that in (i) lack the bulk of characteristics making CC interesting and seem to be quite parallel to other instances of selected tensed CPs.

8 More than one temporal adjunct can appear, indeed. However, one must be a temporal interval of the time denoted by the other:

(i) Ahir el Pere li va fer atacar el campament durant la nit.
'Yesterday, Peter made him attack the camp during the night.'

9 For a chain CH= $[x_n, x_{n-1}, \ldots, x_1]$, it must be the case that, given $i > 1$, x_i must c-command x_{i-1}, and the way from x_{i-1} to x_i must be minimal (shortest step), see Chomsky (1992). A 'classical' approach to these facts would rest on the ECP and relativized minimality.

10 After V2 incorporates to V1. the latter may excorporate, at least in some

Catalan dialects (the same is true for Italian and French), allowing some adverbs, floating quantifiers and the negative particle to appear between both verbs. See Guasti (1992) and Villalba (1993).

11 It would be a matter of discussion whether CC involve two or just one event. In Guasti (1992) and Villalba (1993), it has been argued on the basis of non-temporal adverbs scope ambiguities that V2 has its own event. argument. See also Alsina (1992) for a similar conclusion; cf. with Ritter & Rosen (1993).

12 It is worth noting that some speakers find sentences like (23a) acceptable, however. See Villalba (1993) for a possible explanation.

13 It might be argued that there exists a proper representation for (24a): once VI applies, incorporating both V2 and Det to V1, the moved Det does c-command its trace. However, if, as Chomsky (1992:n.20) suggests, chain formation is better understood derivationally rather than representationally, then the violation would still be operative, ruling out the sentence.

14 However, as F. Benucci (p.c.) points out, there exist several non-standard Romance dialects where a causee clitic appears (sometimes as a copied clitic) attached to V2 (some examples can be found in Benucci 1990:ex.(15)). I have no explanation for these examples.

15 Needless to say, incorporation to a higher head is not a option, as we have just seen before. Neither is incorporation to the trace of V2. Probably, traces bear no Case features as long as it is the whole chain [V2, *t*] that percolates its features up.

16 On the nature of the case borne by the causee and the Case properties of V1 see Villalba (1993).

17 The same explanation holds for internal dative clitics in the so-called *faire-par* construction. See Kayne (1975) and Burzio (1986) for the relevant examples.

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